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ABSTRACT

This document contains the National Council on Vocational Education's recommendations for improving the effectiveness of the vocational-technical educational system. They follow a list of council members, explanations of the Carl D. Perkins Vocational Education Act and the purpose of the council, a quiz on vocational-technical education for the reader, and a description of vocational-technical education as a hidden national treasure. The recommendations address the council's desire to (1) improve program effectiveness by offering states flexibility in providing services to special populations, further implementing the concept of technical committees, and maintaining the emphasis on academic skills; (2) increase the cooperation between business and vocational education by expanding model programs; (3) retrain adults by emphasizing lifelong learning; (4) provide access to information regarding the market demand for skills by developing a national labor force database; (5) meet the needs of handicapped people by establishing successfully employed graduates as role models; (6) link vocational education with the Job Training Partnership Act (JTPA) by (among other things) making similar the timetables for vocational education and JTPA; and (6) provide current information on the types and levels of occupational competencies by working with business, industry, and labor. The document also includes information on the council's national awareness campaign and awards it presents, a summary of its meetings in 1988, biographies of members, and seven references. (CML)

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AMERICA'S HIDDEN TREASURE

THE URGENT NEED TO RECOGNIZE AND PROMOTE THE NATION'S VOCATIONAL-TECHNICAL EDUCATION SYSTEM

A REPORT TO THE AMERICAN PEOPLE

U.S. DEPARTMENT OF EDUCATION
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NATIONAL COUNCIL ON VOCATIONAL EDUCATION
1989 2

AMERICA'S HIDDEN TREASURE

THE URGENT NEED TO RECOGNIZE AND PROMOTE THE NATION'S VOCATIONAL-TECHNICAL EDUCATION SYSTEM

A REPORT TO THE AMERICAN PEOPLE

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Executive Director

Joyce L. Winterton of Washington, D.C.

Honorable George Bush
President of the United States
The White House
Washington, D.C.

Dear Mr. President:

This Nation has a magnificent system ready to educate and train millions of Americans for today's workplace, and ready to help this country to meet international economic competition head-on. That resource is the vocational-technical education system in place today. Unfortunately, this system is little known or recognized by government leaders, educators, and the public.

In this report, the National Council on Vocational Education explains why the Nation should make greater use of the vocational-technical education system, and how that system can benefit youth and adults throughout the country. The Council believes strongly that greater public understanding of the vocational-technical education system will rapidly bring about greater use of this wonderful resource.

The Council includes in this report its recommendations for improving the effectiveness of the vocational-technical education system. What is needed is leadership at the Federal, State, and local levels to bring about public recognition of the value of the vocational-technical education system and to promote greater use of that system by individuals planning their careers.

I have the honor, therefore, to transmit herewith the Annual Report for Fiscal Year 1988 of the National Council on Vocational Education, pursuant to Section 431(g) of the Carl D. Perkins Vocational Education Act of 1984 (Public Law 98-524).

Respectfully,

Michael R. Farley

Michael R. Farley
Chairman
National Council on Vocational Education

A note on the National Council on Vocational Education

The 17 members of the National Council on Vocational Education are appointed by the President to carry out the mandate of the Council. Congress established the Council under the Carl D. Perkins Vocational Education Act of 1984 to advise the President, Congress, and the Secretary of Education on a wide range of issues pertaining to vocational-technical education. Further information on the Council and the Perkins Act appears at the end of this booklet.

CONTENTS

Members of the National Council on Vocational Education 6

The Carl D. Perkins Vocational Education Act and the National Council on Vocational Education 8

A Quiz: Testing Your Knowledge of Vocational–Technical Education Today 10

America's Hidden Treasure 12

Recommendations and Other Council Initiatives 19

Appendix A : Council Meetings and Activities in Fiscal Year 1988 43

Appendix B : Biographies of Council Members 45

Appendix C : References and Resources 53

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The Carl D. Perkins Vocational Education Act and the National Council on Vocational Education

Vocational education has ranked high as a national priority for many years. Congress has long recognized the close relationship between vocational education and the strength of the Nation's economic base, and has used Federal leadership and financial resources to encourage and help the States to fulfill their primary responsibility to offer quality vocational education to all students across the country who need and seek such education.

In the Carl D. Perkins Vocational Education Act of 1984 (Public Law 98-524), named in memory of a distinguished Member of Congress who advocated expanded education programs, Congress created the National Council on Vocational Education and renewed a Federal commitment to assist States to expand and improve quality vocational educational programs. The Act is intended to ensure that individuals have access to quality vocational education, promote cooperation between public agencies and the private sector in preparing individuals for employment, and improve the academic foundations of vocational students. The Act is also aimed at retraining displaced workers in new skills, assisting the most economically depressed areas to raise their occupational competencies, improve the effectiveness of consumer and homemaking education, and strengthen research in vocational education.

The Act requires that the Council consist of 17 members appointed by the President, of whom 9 shall represent the private sector. The current membership is drawn from widely diverse backgrounds in business, real estate, finance, government, education, communications, and public utilities and represents all regions of the country.

The Perkins Act mandates the Council to prepare this annual report, and to advise the President, Congress, and the Secretary of Education on:

- The effectiveness of the Vocational Education Act or its implementation in achieving its stated purpose, and in providing students with skills that meet needs of employers.
- Strategies for increasing cooperation between business and vocational education so that training is available for new technologies for which there is a demand.
- Implementation of the Perkins Act and of the Job Training Partnership Act, and on policies needed to expand and improve vocational-technical education programs (and apprenticeship programs) in order to build a coordinated capacity adequately to prepare America's workforce for employment.
- Practical approaches to retraining adult workers, and to enhancing education, business, and labor cooperation in retraining efforts.
- Effective ways of providing access to information regarding the market demand for skills that will enable State and local personnel to develop responsive vocational education curricula.
- Vocational education needs of the handicapped and the level of participation of the handicapped in vocational education programs.
- Types and levels of occupational competencies necessary for entry and sustained productive employment.

Previous Federal legislation authorized a National Advisory Council on Vocational Education. The Perkins Act changed the name, membership, and mandates of the Council, but retained the basic purpose -- to provide advice at the national level on vocational education.

A Quiz: Testing Your Knowledge of Vocational-Technical Education Today

The following self-test will give readers an idea of their knowledge of some of the current trends and directions in vocational-technical education. Directions: Match the number items on the left and right with the correct letter answer in the center.

_____ **1.** A vocational-technical education course that teaches how to apply principles of physics in completing tasks done on the job.

_____ **2.** A plan that articulates high school vocational-technical programs with a 2-year community college associate degree, and then a university bachelor's degree.

_____ **3.** A nonprofit organization that matches the needs of business and industry to education programs.

_____ **4.** The percent of jobs that, even by the year 2000, will require education beyond high school but not a bachelor's degree.

_____ **5.** A magazine that is mailed to parents and students to inform them about career opportunities.

_____ **6.** Courses developed by a consortium of States to help students learn the application of math and science principles in the real world.

A. 80%

B. Career Succes

C. Small Companies

D. JTPA

E. Technology Exchange Center

F. A lot more than you think

G. Alliance for manufacturing productivity

H. Applied mathematics, applied biology, and chemistry

I. 2+2+2

J. 35%

K. 29%

L. Principles of technology

M. 50%

N. Health Services

O. Construction

P. Electronics

Q. Fortune 500

_____ **7.** An agreement with businesses and community colleges to transfer manufacturing technology from universities, large businesses, and government research to smaller companies.

_____ **8.** Most of the new jobs in this country are created by what type of companies?

_____ **9.** Vocational-technical education provides the majority of actual training for this program

_____ **10.** How many U.S. companies need and support vocational-technical education?

_____ **11.** An industry that is facing a shortage of qualified workers.

_____ **12.** The percentage of the high school graduating class of 1985 that will complete a bachelor's degree.

Answers are on page 18.

Scoring:

If you answered 10 to 12 correctly, you are well on your way to understanding the important role of vocational-technical education today.

If you answered six to nine correctly, you have some homework to do.

If you scored below five, you need help! Call or write the National Council on Vocational Education, your State Council on Vocational Education, or the State Director of Vocational Education.

AMERICA'S HIDDEN TREASURE

Everybody in this country benefits from vocational-technical education, but most people know next to nothing about it, what it does, or how it works. Some people -- including some government leaders and even educators -- seem to care little about this wonderful and powerful resource that this Nation has. The National Council on Vocational Education calls vocational-technical education America's hidden treasure, because it's as good as the gold in Fort Knox -- and just about as far from public view.

Vocational-technical education is an important national treasure because:

Eighteen of the 20 fastest growing occupations within the next decade require vocational-technical education.

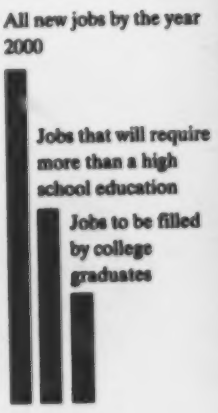
- Eighteen of the 20 fastest growing occupations within the next decade require vocational-technical education (the other 2 require a bachelor's degree).
- Vocational-technical education prepares students for 26 of the 37 occupations that the Bureau of Labor Statistics predicts will account for the largest number of new jobs by 1995.

All of these facts add up to a picture of vocational-technical education that differs dramatically from the stereotype of wood shop and auto mechanics. The American vocational-technical education system now in place can help to solve many of the social and economic problems of the Nation.

Spread across this Nation are some 26,000 institutions that teach vocational-technical education to more than 16 million students at any one time. They are learning skills that are critically important to the economic future of this country, important to every man, woman, and child in this country. These students are studying to become the high-tech computer programmers and operators, equipment assemblers, and communications specialists who will help lead this Nation into the 21st century.

Some people may still view vocational-technical education as something taught in a dingy print shop or metal shop or auto mechanics shop. That old stereotype -- vocational-technical education as dull and boring and leading to a dull and boring life -- just does not hold water any more, if it ever did.

Vocational-technical education today is as sparkling new and bright as the surface of a NASA rocket, which as a matter of fact was probably fabricated, assembled, and prepared for liftoff by graduates of vocational-technical education. In fact, on the NASA Space Shuttle program, there were five technicians employed for every engineer. Vocational-technical education offers a course of study that leads to exciting and financially profitable work. It opens wide the door of opportunity for millions of young people, displaced workers, and the handicapped to build rewarding and fulfilling lives for themselves and their families.


All new jobs by the year 2000
Jobs that will require more than a high school education
Jobs to be filled by college graduates

The value of this hidden asset can be seen daily in classified ads in the newspapers of the Nation. The ads call for applicants who are electricians, floral designers, glaziers (the workers who replace broken windows), legal secretaries, medical X-ray technicians, and printing press operators, to name just a few. This evidence shows that anyone who has a skill can find a job and will be employed if that skill matches the needs of today's economy. The jobs for people are higher skilled and better paying jobs; the lower skilled jobs can, in an increasing number of cases, be done by machine.

Typical classified ads also tell the story of modern-day vocational-technical education graduates at work:

- A wide variety of occupations -- many choices for the individual.
- Available jobs -- these people are in demand.
- Good pay and benefits, including profit-sharing and bonuses -- employers want these people.
- High skill requirements, including command of traditional academic subjects such as grammar -- these people are well educated.

The time has come for policymakers, decisionmakers, and educators to take a strong second look at vocational-technical education. A lot has happened since they may have last looked at this valuable national resource. Government leaders at all levels should also ensure that quality vocational-technical education programs are available to all students who want them. Although

these programs are effective and up-to-date in many places, some can be improved; Federal, State, and local government leaders should work to ensure that all such programs are of the highest possible quality.

The time has come, too, for parents and students themselves to take a strong second look at the benefits of vocational-technical education. The U.S. economy is headed down a track that will require millions of trained workers in the coming years. Business and industry are way ahead -- they know the value of vocational-technical education and support it enthusiastically.

As the want ads show, employers are eager to attract skilled workers and are willing to offer the security, pay, and benefits to recruit and retain those workers. Vocational-technical education is worth looking at. It's the wave of the future.

Vocational-Technical Education Has Important Consequences

Vocational-technical education graduates more than 2 million skilled workers each year.

The effect of vocational-technical education in this society is broad and deep. This educational system is helping the Nation to meet foreign competition through producing high-quality technically skilled workers (see below). It is helping to reduce the rate of illiteracy: 27 million adults in this country cannot read. And it helps to raise the general educational level of the population, which is important as the 21st century approaches.

Consider these facts about the Nation's vocational-technical education system:

- It graduates more than 2 million skilled workers each year.
- It provides 23 million adults with more than 43 million classes a year.
- Of all high school seniors who graduated in 1982, 97 percent took at least one vocational-technical education course.
- Forty-five percent of all vocational credits earned are earned by the top academic students.

14

Consider that students in this system increasingly go on to postsecondary education to acquire the high levels of skills needed in today's economy:

- 60 percent of all high school vocational graduates enter some form of postsecondary education.

Consider that the employment marketplace is attuned to the graduates of the vocational-technical education system:

- Most jobs require education beyond high school but do not require a bachelor's degree.
- Of the 1980 high school graduates who immediately entered 4-year colleges, fewer than one-sixth attained a bachelor's degree.

Vocational-Technical Education Helps America in International Competition

The United States faces stiff international economic competition. Foreign countries now manufacture major portions of industrial and consumer goods once manufactured in this country. In the case of some finished goods, including certain television products, the United States does not manufacture the product at all, but imports it from abroad. Foreign nations now challenge American business across a broad spectrum of economic activity -- and in some cases the foreign competitors are winning.

60 percent of all high school vocational graduates enter some form of post-secondary education.

The answer to this competition is not trade barriers. Free trade benefits both the United States and its foreign allies. Rather, the answer lies in improving America's capacity to meet foreign competition on its own terms -- in the efficient manufacture of high-quality goods.

Compared with other countries, the U.S. workforce competes well with white-collar and technical managerial counterparts in other nations. American schools turn out the highly skilled scientists, engineers, business managers, and financial experts who are vital to business success. In the production plant, however, American workers who are well prepared to compete with their foreign counterparts are in short supply.

The lesson is clear: government policymakers and educators must stop concentrating on preparing the technical and managerial elite. They must enlarge their vision to include the critical segment of the workforce who will handle the production phase of the competitive cycle. It is on these men and women that responsibility falls to maintain efficiency and quality in producing the goods and services that can compete effectively in the international marketplace. These workers will gain their skills in the Nation's vocational-technical education system.

Vocational-Technical Education Trains At-Risk Populations

An important and often overlooked contribution of the vocational-technical education system is the training of at-risk populations to become economically self-sufficient. This training enables people who might otherwise be deprived of the opportunity to work with satisfying and dignified ways to earn their own way.

Most jobs require education beyond high school but do not require a bachelor's degree.

Consider these facts:

- Vocational-technical education serves 3 million secondary and postsecondary disadvantaged and handicapped students each year.
- Eighty-two percent of the students served through disadvantaged and handicapped programs enter employment or continue their education on completion of their program.

A study in New York City conducted by the New York City Board of Education Office of Education Assessment, found that the dropout rate for occupational (vocational-technical education) students was 4.7 percent, while the non-occupational education student dropout rate was 13.5 percent, nearly three times as high. The Council believes, as do those who conducted the study, that the rate is lower because the occupational education students have made a choice and have a purpose for their education.

Vocational-Technical Education Gives Employers the Skilled Workers They Want

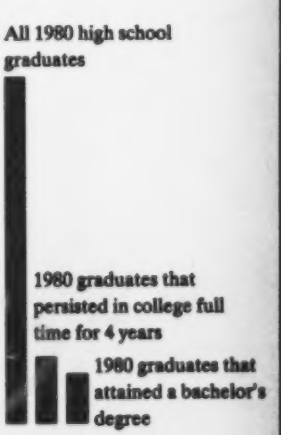
Correcting the mismatch between the labor pool and the future marketplace for employment requires measuring the needs of employers. What kinds of employees do American employers want?

In a recent report by the American Society for Training and Development and the U.S. Department of Labor, the answer came through loud and clear: employers want workers who have mastered not only the basic academic skills of reading, writing and arithmetic, but also much more. They want people who can learn on the job, master new skills, solve problems, work well with colleagues, and deal successfully with customers. This package of capabilities sounds like a course description for a quality vocational-technical program.

Specifically, the report, *Workplace Basics: The Skills Employers Want,* found that employers seek men and women with these attributes:

- Know how to learn.
- Can read, write and compute.
- Listen well and speak effectively.
- Can think creatively and solve problems.
- Take pride in their work, have good self-esteem, are able to set and meet goals, and manage their career well.
- Have good interpersonal skills, can negotiate with others, and are team players.
- Understands the importance of organizational effectiveness.

Every one of these skills is either taught as a matter of course or implied in classroom work or group projects in vocational-technical education.


All 1980 high school graduates
1980 graduates that persisted in college full time for 4 years
1980 graduates that attained a bachelor's degree

Opportunities for Vocational-Technical Education Graduates.

- A wide variety of occupations
- Available jobs
- Good pay and benefits
- High skill requirements

Answers to the Self-Test

1. L
2. I
3. E
4. A
5. B
6. H
7. G
8. C
9. D
10. F
11. N or O or P
12. K

18

RECOMMENDATIONS AND OTHER COUNCIL INITIATIVES

RECOMMENDATIONS

The Carl D. Perkins Vocational Education Act charged the National Council on Vocational Education with devising ways to improve and strengthen vocational education. The following recommendations respond to the mandates to the Council in the Act and provide specific suggestions. Many of these recommendations include examples of actual programs that are working to fulfill these mandates. The difficult challenge was to select a few examples among the many excellent examples that do exist.

The purpose of the recommendations is to advise the President, Congress, and the Secretary of Education on the leadership role that the Council envisions for the Federal Government; and to encourage State governments to view vocational-technical education as an important ingredient in economic development. States should coordinate vocational-technical education policy and programs with economic development through the Office of the Governor. At the Federal level, coordination of all programs that deal with education for employment should be emphasized.

Another thrust of these recommendations is aimed at the education establishment and private industry, and seeks to encourage equal emphasis on vocational-technical and academic education in public schools.

For the reader's convenience, the Council presents a summary of recommendations, followed by a more detailed presentation that includes rationales and, in many cases, examples of actual programs.

Summary of Recommendations

In this report, the Council forwards to the President, Congress, and the Secretary of Education the following recommendations. In Part II of the report, the Council presents detailed rationales for the recommendations and examples of successful implementation of similar recommendations around the country. The recommendations are organized according to the mandates of the Perkins Act.

20

Recommendations for Improving Program Effectiveness

■ MANDATE: Improve the implementation and effectiveness of the Vocational Education Act.

1. There must be leadership at the national level from the Congress, the White House, and the Department of Education for needed improvements to occur. Old stereotypes and lack of current information on vocational-technical education cannot drive Federal policy.
2. Maintain the emphasis on program improvement in the Vocational Education Act.
3. Continue to provide services to special populations and allow States flexibility in offering those services.
4. Continue implementing the concept of Technical Committees.
5. Maintain the emphasis on reinforcing and teaching academic skills.
6. Use information from national awards to identify and highlight model programs.
7. Change the name of the Vocational Education Act to the Vocational-Technical Education Act.
8. Continue to serve a wide range of clientele, including secondary and postsecondary students, individuals needing business and industrial retraining, and older workers wanting second careers.
9. Federal funds should be used for the development and support of curriculums through consortiums of State organizations.
10. States should ensure that teacher education and in-service programs include current information on vocational-technical education.
11. Federal funds should be used to assist vocational-technical education programs equally in rural and urban areas.
12. Improve vocational-technical education by broadening opportunities for graduates.

Recommendations for Increasing Cooperation Between Business and Vocational Education

■ **MANDATE: Provide strategies for increasing cooperation between business and vocational education so that training is available for new technologies.**

1. Strengthen and expand mutually beneficial partnerships with business and industry.
2. Expand model programs that implement strategies to bring together the needs of business, industry, and labor with vocational-technical education to address the supply and demand for the Nation's workforce.
3. Use curriculum developed and updated by business, industry, and labor.
4. The majority of the members on the National and State councils on vocational-technical education should continue to be representatives from business and industry.

Recommendations for Retraining Adult Workers

■ **MANDATE: Provide approaches to retraining adult workers and to enhancing education, business, and labor cooperation in retraining efforts.**

1. Update and improve academic skills and employment skills transferable to industry.
2. Work with business and industry to identify effective partnerships for retraining.
3. Emphasize life-long learning as necessary to remain employable.

Recommendations for Access to Information

■ **MANDATE: Provide access to information regarding the market demand for skills.**

1. States should establish a modern labor market database system.
2. States should provide follow-up data on former students and retraining programs.
3. Increase the awareness and improve the image of vocational-technical education through national leadership and national media attention.

Recommendations for the Handicapped

■ **MANDATE: Advise on the vocational needs of the handicapped and the level of participation of the handicapped in vocational education programs.**

1. Coordinate Federal programs and jointly funded efforts that serve the handicapped.
2. Establish as role models examples of successful graduates with disabilities who have completed programs and are employed.

Recommendations for Linking with the Job Training Partnership Act

■ **MANDATE: Advise on the implementation of this Act and the Job Training Partnership Act and policies needed to expand and improve vocational-technical education programs (and apprenticeship programs).**

1. **The law should continue to facilitate cooperation between the Job Training Partnership Act (JTPA) and the vocational-technical education system.**
2. **Requirements and timetables for the Carl Perkins Act and Job Training Partnership Act (JTPA) should be similar.**
3. **Continue efforts to improve and expand apprentice programs.**

Recommendations for Occupational Competencies

■ **MANDATE: Provide current information on the types and levels of occupational competencies necessary for entry and sustained productive employment.**

1. **The mandates of the National Council on Vocational Education should include work with business, industry, labor, and trade associations in providing information on occupational competencies.**

24

DETAILED RECOMMENDATIONS

Recommendations for Improving Program Effectiveness

■ **MANDATE: Improve the implementation and effectiveness of the Vocational Education Act.**

1. **There must be leadership at the national level from the Congress, the White House, and the Department of Education for needed improvements to occur. Old stereotypes and lack of current information on vocational-technical education cannot drive Federal policy.**

2. **Maintain the emphasis on program improvement in the Vocational Education Act.**

   ■ **Rationale:** The Vocational Education Act makes available to all students quality programs that produce a highly trained workforce. Yet, not all programs are uniformly available across the country and continuing effort is needed to ensure that programs that serve an increasingly technical, computerized workplace are available to everyone.

   The Advanced Center for Technology Training/Management Training Program at the Jordan Technical Center in Salt Lake City offers management courses for middle- and upper-level positions. Students learn how to use and manage electronic spreadsheets, databases, time management, telecommunications, and an assortment of word processing packages. On graduation, students receive 3 high school credits and 16 college credits from Salt Lake Community College.

3. **Continue to provide services to special populations and allow States flexibility in offering these services.**

■ **Rationale:** Employment statistics indicate a growing number of job opportunities for anyone with the necessary education and skills. An increasing number of people in the workforce will be minorities, women, disadvantaged, and handicapped. Often, these students need additional services to participate and succeed in vocational-technical programs. These services should not only be continued, but also States should have sufficient flexibility in applying Federal funds to these programs so that monies meet state and local needs.

The North Florida Junior College Post-Secondary Vocational Center for the Hearing Impaired trains students from the Southeast, Canada, and Puerto Rico. The program integrates training in vocational skills, employment skills, communication skills and independent living skills. In the past 3 years, 60 students have participated in this program and one recent student won the Florida Vocational Industrial Clubs of America competition in masonry.

4. **Continue implementing the concept of Technical Committees.**

■ **Rationale:** The concept of Technical Committees, an integral part of the Carl Perkins Act, brings together representatives from business, industry, labor, and education to review curriculum and competencies taught in vocational-technical education. The Committees insure that vocational-technical courses are current with modern technology and will produce students who are employable and productive.

Technical Committees established in Pennsylvania involve 27 representatives from business, industry, and labor who advise vocational-technical educators on competencies and requirements in such fields as electronic technology, data processing, building trades maintenance, building construction, diesel mechanics, auto body repair, automotive mechanics, and food management, production, and service. Information from technical committees is integrated into course curriculums.

5. **Maintain the emphasis on reinforcing and teaching academic skills.**

■ **Rationale:** Academic skills are an integral part of vocational-technical education. Students need to understand how to apply the principles of such studies as math, science, and language to their jobs. It is essential that students bridge the gap between academic education and the working world. Vocational-technical education achieves this by helping students apply their academic skills to vocational programs.

The Center for Occupational Research and Development (CORD) in Waco, Texas, has joined with a consortium of 46 State vocational agencies to develop materials and offer courses in applied communications, applied mathematics, applied biology, and chemistry and principles of technology. These courses teach students how to apply abstract theories to practical situations in the workplace. Created in 1984, the Principles of Technology course has been taught to more than 25,000 students in just its first two years. The Applied Mathematics course is being field tested with 6,250 students. The Applied Sciences and Communications courses are in developmental stages and nearing implementation.

6. **Use information from national awards to identify and highlight model programs.**

■ **Rationale:** Too often, highly successful, model vocational-technical education programs go unnoticed by communities and groups that could benefit from knowing what they do and how they work. National awards that draw special attention to programs can serve as a way to inform potential students and employers about vocational-technical education opportunities.

Presentation of the National Council on Vocational Education Awards is an annual event that recognizes an Outstanding Secondary Student, Outstanding Post-secondary Student, Outstanding Special Populations Student and Outstanding Business or Labor Involvement. In 1988, 20 States nominated 56 candidates. Winners from Texas, Florida, New York, and Michigan were recognized in a special ceremony in Washington, D.C.

The Department of Education Secretary's Award for Outstanding Vocational Education Programs recently showcased 10 programs, including the "Twilight Program" in New Jersey. This program provides intense vocational skills training to troubled adolescents. During the usual school downtime, 4 p.m. to 7 p.m., Twilight offers courses in commercial foods, auto body repair, welding, office occupations and carpentry -- skills known to be in demand in Somerset County, New Jersey. The recidivism rate to correctional institutions for its students is less than 17 percent and lower than other programs.

7. **Change the name of the Vocational Education Act to the Vocational-Technical Education Act**

■ **Rationale:** The current title of the Act does not accurately reflect the purpose or scope of its programs. Vocational education has evolved into a highly technical discipline, encompassing such areas of study as computer sciences, biotechnology, and laser technology as well as highly sophisticated industrial, agricultural, and economic processes. The title of the Act should indicate what vocational-technical education is all about.

8. **Continue to serve a wide range of clientele, including secondary and postsecondary students, individuals needing business and industrial retraining, and older workers wanting second careers.**

■ **Rationale:** Vocational-technical education operates under many stereotypes and misconceptions, including the notion that it serves only secondary and disadvantaged students. Contrary to popular belief, vocational-technical students come from a variety of educational and socioeconomic backgrounds and their age groups reach from teenagers to the semi-retired. The average age of postsecondary students in community, technical, and junior colleges is 29 years old. The multi-faceted, multi-hued face of vocational-technical education needs to be emphasized.

9. **Federal funds should be used for the development and support of curriculums through consortiums of State organizations.**

■ **Rationale:** Joint efforts by consortiums of State organizations are an efficient, economical way to develop curriculum that can be used by many schools and many businesses. The cost to an individual State to prepare a complete course for a particular industry or specific training is often prohibitive. By sharing costs and resources, states and vocational-technical education programs can develop curriculum that are complete, up-to-date and responsive to actual employer demands.

10. **States should ensure that teacher education and in-service programs include current information on vocational-technical education.**

■ **Rationale:** The responsibility for training new and experienced teachers lies with individual States, putting them on the front-line for disseminating information about vocational-technical education. State educational authorities should not only be current on available vocational-technical education opportunities, but also require certified teachers to become familiar with these programs.

11. **Federal funds should be used to assist vocational-technical education programs equally in rural and urban areas.**

■ **Rationale:** There has been a trend for Federal funds to be concentrated more in urban areas because of their larger concentrations of secondary and disadvantaged students. However, vocational-technical education's expanding base encompasses a diverse population and many of these people are in rural areas. The need for vocational-technical education is vital outside metropolitan areas where employees and employers are linking through modern communications technologies and where new industries are relocating.

12. Improve vocational-technical education by broadening opportunities for graduates.

■ **Rationale:** Vocational-technical education offers a wide array of opportunities for its graduates, opportunities in addition to immediate employment. These include participation in programs for Associate degrees, Bachelor degrees, Apprenticeship programs, and assistance in establishing a small business.

The articulated programs between secondary schools, post-secondary schools and universities, called the "2 + 2 + 2 Program," is being implemented at Vermont Technical College. Tech Prep is a project that encourages curriculum coordination between the State's area vocational-technical centers, their sending high schools, and Vermont Technical College. The 2 + 2 + 2 breakdown is:

2 - Area Vocational Center.

2 - Vermont Technical College (Associate Degree).

2 - 4-year college.

Tech Prep helps students choose high school and vocational-technical courses that will help them prepare for either work or college.

Recommendations for Increasing Cooperation Between Business and Vocational Education

■ **MANDATE: Provide strategies for increasing cooperation between business and vocational education so that training is available for new technologies.**

1. **Strengthen and expand mutually beneficial partnerships with business and industry.**

   ■ **Rationale:** Strong alliances with business and industry will guarantee that vocational-technical education programs meet the needs of employers and that they have access to a pool of potential employees that is thoroughly trained and qualified.

   The partnership between Martin Marietta Orlando Aerospace Corporation and the Orange County School District and the Mid-Florida Technical Institute has produced a program that educates and retrains employees for the Kennedy Space Center. Fully 80 percent of the Martin Marietta Aerospace jobs require courses offered at Florida Vocational-Technical centers. Since the inception of this partnership, approximately 28,000 vocational education students have taken jobs with Martin Marietta Aerospace.

2. **Expand model programs that implement strategies to bring together the needs of business, industry, and labor, with vocational-technical education to address the supply and demand for the Nation's workforce.**

   ■ **Rationale:** Business and education programs often exist in separate worlds and while they may have common needs, there may be no channel of communication between them. Outreach programs, employment brokers or simply knowledgeable go-betweens are needed to bring together vocational-technical educators and businesses. Such an approach can assist in local economic development.

The Technology Exchange Center in Santa Ana, California, is a nonprofit organization that matches the needs of business and industry to the education system. Acting as an "education broker," the Center identifies labor shortages and helps institute company-specific training programs at regional vocational centers and community colleges. In a 4-year period, the Center worked with 205 employers, delivered 212 employer-specific programs, and trained and retrained 9,700 people.

3. Use curriculum developed and updated by business, industry, and labor.

■ **Rationale:** The most successful curriculums are those developed by the very employers who will be hiring program graduates. Curriculums developed by business, industry, and labor are quality programs relevant to specific and current employment opportunities.

In the construction industry, the Manpower and Training committee of the Associated General Contractors joined the Oklahoma State Department of Vocational and Technical Education to develop instructional materials. The materials developed by the contractors formed the foundations for courses and working competency in carpentry, cement masonry, bricklaying, millwright, heavy equipment operations and industrial mechanical maintenance. These materials have been used in courses taught to 45,217 students, many who have gone on to work in construction trades.

Similarly, the Associated Builders and Contractors have developed curriculum materials called, "Wheels of Learning." The competency-based curriculum can be used to provide training and hands-on experience in vocational-technical education construction programs.

4. **The majority of the members on the National and State councils on vocational-technical education should continue to be representatives from business and industry.**

■ **Rationale:** One of the major strengths of vocational-technical education is its practical, working relationship with business and industry. It is a provider/client rapport that must be constantly reinforced. The presence of business and industry representatives on vocational-technical education councils is one way educators can make sure their programs meet the needs and requirements of their clients.

Recommendations for Retraining Adult Workers

■ **MANDATE: Provide approaches to retraining adult workers and to enhancing education, business, and labor cooperation in retraining efforts.**

1. **Update and improve academic skills and employment skills transferable to industry.**

■ **Rationale:** Academic skills are an essential element of vocational-technical education and they should be as up-to-date and current as technical skills. Just as technology changes and evolves, so too do academic principles and knowledge. Programs for retraining, people re-entering the workforce or changing jobs should include current information on relevant academic studies as well as on technical developments.

The UAW-Ford Education, Development, and Training Program was a key feature of the Collective Bargaining Agreement between Ford Motor Company and the United Auto Workers (UAW) in 1982. The Agreement chartered the Program to serve the interests of active and displaced UAW-represented Ford hourly employees, through education, training, retraining, and development activities and in the process contribute to the

competitiveness and well-being of the Company--aspects that are essential to the job security and personal growth of Ford workers. Support and technical assistance for the development of two of the UAW-Ford programs were made available through the Federal Office of Vocational and Adult Education. Those two programs emphasize the enhancement of workers' skills by increasing the accessibility of college and university programs, and building an effective in-plant guidance and support system for workers. Since 1982, more than 55,000 employees have benefited from the services provided under the UAW-Ford Education, Development, and Training Program.

2. **Work with business and industry to identify effective partnerships for retraining.**

■ **Rationale:** Retraining programs must be grounded in the needs of business and industry. Programs divorced from business and industry run the risk of being quickly outdated or unsuited for current employment requirements.

The Alliance for Manufacturing Productivity was developed by Autodesk, Inc., a world leader in computer-aided drafting and design. Autodesk has joined with 25 community colleges and technical institutes across the country to share developing technology for retraining programs. The Alliance, established in 1987, approved in its first year, 22 two-year colleges for participation and recruited more than 20 companies to participate through corporate sponsorship.

A similar concept is used by the National Coalition of Advanced Technology Centers. Working with 25 two-year, post-secondary institutions in 16 States, this program delivers continuing education in customized training and technology transfer services by assisting small and mid-sized companies to improve specific processes, such as quality control, methods of manufacturing, use of computers, and accounting procedures.

3. **Emphasize life-long learning as necessary to remain employable.**

■ **Rationale:** Vocational-technical education, like all education and every job, requires constant learning and relearning. Students, employees, and would-be employees need to recognize that constant education and training is a normal part of working.

The Advanced Center for Technology Training is working with community colleges and secondary vocational-technical education programs in Iowa, Illinois, Michigan, and Ohio to reinforce the constant-learning process. The approximately 1,000 students in these programs are learning computer integrated manufacturing principles and how to apply basic education skills to technology on the job.

Recommendations for Access to Information

■ MANDATE: Provide access to information regarding the market demand for skills.

1. **States should establish a modern labor market database system.**

■ **Rationale:** It is important that statistics and information collected on a Statewide basis are not only current but also easily accessible to students and employers. Timely statistics and data on employment insure that vocational-technical education programs meet current needs and do not lag years behind.

The Occupational Information Systems (OIS), currently operating in 38 States and Territories, provides computerized labor market information easily accessible to a variety of audiences. An additional seven States have or are acquiring mainframe computer OIS systems.

The National Occupational Information Coordinating Committee (NOICC), which has been monitoring OIS, is also conducting a program for the Naval Reserve to identify community colleges, 4-year colleges, private technical schools, secondary vocational centers, and hospitals that may be able to train reserve

personnel. The NOICC database will be available to 84 Naval Reserve Centers in 20 States and could readily serve as a model for data exchange in the private sector.

2. **States should provide follow-up data on former students and retraining programs.**

■ **Rationale:** Program accountability and credibility depends on accurate, timely data. The effectiveness and results of programs can be better judged with information on former students. Verifiable program results will help educators to provide relevant courses.

The Florida Education and Training Placement Information Program uses vocational agency computer data on Social Security numbers to match student records with employer wage reports from the Department of Labor and Employment Security. This data provides accurate information on former students and their progress in the job market. It is also used by the Department of Education vocational education program in planning and evaluating courses. In 1987-88, this system provided data on 66,949 former students.

3. **Increase the awareness and improve the image of vocational-technical education through national leadership and national media attention.**

■ **Rationale:** Vocational-technical educators are very aware of the stereotypes attached to their courses -- images of being outdated, old-fashioned and serving mainly the underachiever. The facts belie this image. Yet only national leadership and attention to quality programs and their numerous successes will dispel the myths about vocational-technical education.

Career Success Magazine, a publication distributed nationally that covers vocational education activities, is one effort that is helping to change vocational education's image. The magazine, a four-color publication with professional graphics and design, shows the vocational technical student to be a contemporary, capable and ambitious individual who is finding success in fields as diverse as health care, electronic media, and agricultural economics. It has highlighted such successful vocational-technical education graduates as fashion designer Calvin Klein, TV news commentator Judy Woodruff, and astronaut Joe Engle.

Recommendations for the Handicapped

■ MANDATE: Advise on the vocational needs of the handicapped and the level of participation of the handicapped in vocational education programs.

1. **Coordinate Federal programs and jointly funded efforts that serve the handicapped.**

   ■ **Rationale:** Although a number of different government agencies serve the handicapped, programs involving occupational skills and job training would be more effective if the various agencies providing these services coordinated their efforts. Federal funds, personnel resources and management time will accomplish more if special education and vocational-technical education share information and responsibilities.

   The Designated Vocational Instruction (DVI) approach in Wisconsin is an interdisciplinary effort between special and vocational-technical education. The overall goal of the program is to significantly improve the scope, sequence, and quality of secondary level vocational-technical education for special needs students. Perkins Act funds are used for the "vocational special needs coordinator."

2. **Establish as role models examples of successful graduates with disabilities who have completed programs and are employed.**

   ■ **Rationale:** Many employers are reluctant to hire the disabled because of either misperceptions or lack of information about the abilities of disabled people. Highlighting the successes of disabled workers would help to dispel stereotypes and inform employers about available, willing, and capable disabled workers.

   The President's Commission on the Employment of the Handicapped has been serving as a forum for featuring the successes of disabled workers. Its national conference includes a panel of prominent employers who recount their positive experiences with disabled workers.

37

Recommendations for Linking with the Job Training Partnership Act

■ **MANDATE: Advise on the implementation of this Act and the Job Training Partnership Act and policies needed to expand and improve vocational-technical education programs (and apprenticeship programs).**

1. **The law should continue to facilitate cooperation between the Job Training Partnership Act (JTPA) and the vocational-technical education system.**

   ■ **Rationale:** Many States have productive working relationships between people providing vocational-technical education and those implementing JTPA. In fact, the majority of actual training for the JTPA is done through vocational-technical education. This coordination helps to provide better services to the disadvantaged as well as to supplement immediate employment skills for JPTA clients. Much would be lost if this cooperative effort were not facilitated.

2. **Requirements and timetables for the Carl Perkins Act and Job Training Partnership Act (JTPA) should be similar.**

   ■ **Rationale:** At present, certain requirements and guidelines for the Act and JPTA establish different criteria and different definitions for completing work. Synchronizing such administrative activities as fiscal requirements would improve both the impact and effectiveness of programs and services. The report published by the National Commission for Employment Policy, The Legal and Fiscal Disjunction Between the Carl Perkins Vocational Education Act and the Job Training Partnership Act, provides specific examples.

3. **Continue efforts to improve and expand apprentice programs.**

   ■ **Rationale:** While apprentice programs are normally offered by industry, vocational-technical education can and should continue to complement these programs with pre-apprenticeship and related classroom instruction.

Integrating and bridging the ties between vocational-technical education and formal apprenticeship programs enhances both offerings.

The "Apprenticeship 2000" initiative by the Department of Labor is a valuable effort to explore the possibility of expanding the apprenticeship concept to more industries.

Recommendations for Occupational Competencies

■ MANDATE: Provide current information on the types and levels of occupational competencies necessary for entry and sustained productive employment.

1. **The mandates for the National Council on Vocational Education should include work with business, industry, labor, and trade associations in providing information on occupational competencies.**

   ■ **Rationale:** The best source of information on what employment requires are the employers themselves. Working groups composed of representatives from industry and trade associations and vocational-technical education are a useful vehicle for collecting competency guidelines for vocational-technical curriculums.

39

OTHER COUNCIL INITIATIVES

The National Council on Vocational Education has undertaken a number of initiatives in fulfillment of its responsibilities under the Perkins Act. In this section, the Council reports on two of its ongoing programs.

National Awareness Campaign On Vocational-Technical Education

The Council believes strongly that myths and misconceptions about vocational-technical education are widely held by the American people, and that these myths and misconceptions seriously impede efforts to educate the quality workforce that the Nation needs. The skills shortage is growing, the link between education and employment has never been more clear, and yet the value of vocational-technical education is widely misconceived and underestimated.

To help correct this situation, and to help elevate vocational-technical education to its proper role in the public perception, the Council has launched a national effort to raise awareness and focus national attention on the values of vocational-technical attention. To those ends, the Council has enlisted the assistance of a coalition of major organizations in the field to support the National Awareness Campaign on Vocational-Technical Education.

The strategy of the National Awareness Campaign is to identify key employees within major corporations who are products of vocational-technical education. The Campaign will recognize these people at the national level, thus fostering broad recognition of them and their educational backgrounds. The Council believes that the best way to demonstrate the value of vocational-technical education is to highlight real-life role models of those who have succeeded because of it.

The members of the coalition are:

- American Association of Community and Junior Colleges
- American Vocational Association
- Associated General Contractors of America
- Brick Institute of America
- Home Builders Institute
- National Association of State Councils on Vocational Education
- National Association of State Directors of Vocational Education
- National Commission for Employment Policy
- National Concrete Masonry Association
- National Coordinating Council for Vocational Student Organizations
- National Council on Vocational Education
- Partners for American Vocational Education

National Council on Vocational Education Awards

As one way in which to raise national awareness about the importance of vocational-technical education, the Council annually recognizes outstanding accomplishments in the field. It presents one award in each of the following categories:

- Outstanding secondary student in vocational-technical education.
- Outstanding postsecondary student in vocational-technical education.
- Outstanding special-needs student in vocational-technical education.
- Outstanding business or labor involvement.

Secondary and postsecondary students must demonstrate a high level of competence in the program through classroom, work experience, laboratory training, related projects, and extracurricular activities. Special-needs students must demonstrate initiative, positive attitude, and self-reliance, and may represent economically disabled and academically disadvantaged individuals; adults in need of training or retraining; single parents or homemakers; individuals participating in programs designed to eliminate sex bias or stereotyping; and criminal offenders served by correctional institutions.

The winner of the award for outstanding business or labor involvement must demonstrate a commitment to vocational-technical education through work in public/private-sector partnerships.

Appendix A:

COUNCIL MEETINGS AND ACTIVITIES IN FISCAL YEAR 1988

The Council is mandated by Congress to meet four times a year. The four meetings in fiscal year 1988 were held:

- December 5, 1987, Las Vegas, Nevada
- March 14, 1988, Washington, D.C.
- May 22, 1988, Washington, D.C.
- September 23, 1988, Santa Barbara, California

Committees

- Executive
- Annual Report
- Awards
- Occupational Competency
- Legislative
- Budget
- Resource Acquisition
- Image/Program Improvement

In addition to the four mandated Council meetings, the Council is actively involved in State and local activities. Information obtained through these experiences is shared at the Council meetings and becomes part of the report and recommendation to the President, the Congress, and the Secretary of Education.

Members of the Council during fiscal year 1988 met with numerous officials and observed many programs, and the Council provided information and assistance to the following organizations:

- American Association of Retired Persons
- Council for Education Development and Research
- Department of Defense, Education Coordinators
- Department of Labor, Apprenticeship 2000 Public Hearing
- Foundation for Hospice and Homecare
- Federal Interagency Committee on Education, Subcommittee on Workplace Literacy
- General Accounting Office
- Members of Congress and Staff
- National Association of Counties
- National Association of State Directors of Vocational Education
- National Governors Association
- National Alliance for Manufacturing Productivity
- U.S. Department of Education
- Vocational Student Organizations
- White House

Appendix B

BIOGRAPHIES OF COUNCIL MEMBERS

MICHAEL R. FARLEY, CHAIRMAN

Mr. Farley is President of Farley & Associates, a firm active in the consulting and developing of new business ventures in the telecommunications and environment industries. A graduate of the University of Arizona and the American College of Life Underwriters, Mr. Farley is active in education, civic, and political activities. He served as Director of Advance for Vice President Bush in 1981, and in 1988 he served as Director of Communications for George Bush for President at the Republican National Convention. He has served as a member of the board of directors of the University of Arizona Foundation and the board of trustees of St. Gregory High School in Tucson. Prior to his designation by President Reagan in 1988 as Chairman of the Council, Mr. Farley served as Vice Chairman of the Council for 3 years.

PIER A. GHERINI, JR., VICE CHAIRMAN

Mr. Gherini is president of Cow-Hollow Investment Company, in Santa Barbara and San Francisco, California, and he is a managing general partner of the Waterfall Group in Ketchican, Alaska, an affiliate company. Cow-Hollow Investment is a diversified management/ development company that is involved in venture capital, commercial real estate, resorts, and property management. Mr. Gherini's activities combine the areas of marketing, public relations, political affairs, and personnel. By gubernatorial appointment, Mr. Gherini has served on California's State Housing and Community Development Commission, and is a former member of the Bay Area Conservation and Development Commission (BCDC).

MARY S. PYLE, VICE CHAIRPERSON

Mrs. Pyle currently serves as an education consultant. Formerly, she was Coordinator of Training and Personnel Development for the Mississippi Power Company. Mrs. Pyle is a member of the Mississippi Vocational Education Board and the State Council on Vocational Education, she is also a member of the Board of Directors of Partners for American Vocational Education. Mrs. Pyle's career is highlighted by increasing responsibilities in Management and Staff Training, Consumer Marketing and Public Relations. She has had extensive volunteer experience in convention/meeting development, legislative efforts coordination and handicapped/special service projects. Numerous awards/recognition in the areas of community service and education, vocational education and business have been awarded Mrs Pyle.

GEORGE J. AMES

President of ASA Properties in San Antonio, Texas, Mr. Ames is active in the oil industry and has extensive background in the food industry. He has served as both a board member and officer of the Southwest Food Industry Association and is a former president of Sweeney Co., the largest independent wholesale food distributor in South Texas. Mr. Ames is a member of the Young Presidents Organization, an international group of business leaders who reached chief executive officer positions before age 40.

JULIUS BELSO

Mr. Belso, president of the Coordinating Committee of Hungarian Organizations in North America, is one of several economic and financial specialists selected by President Reagan to serve on the Council. Born in Hungary, Mr. Belso graduated from the Agricultural Institute of Hungary in 1938. He served as a member of the Hungarian Parliament for 4 years before emigrating to the United States in 1953. For the past 24 years, Mr. Belso has been a member of the board of directors of the Magyar Savings Bank of New Brunswick. In 1984, he became chairman of the board and later president of the finance committee. He is a licensed real estate broker and Realtor and is also part-owner of the Biro-Belso Real Estate Agency. In 1985, Mr. Belso was chosen by the National Heritage Groups Council as the "Outstanding Ethnic Man of the Year." Mr. Belso is a member of the New Jersey Governor's Ethnic Council. He is married and resides in New Brunswick, New Jersey.

C. DeWITT BROWN, JR.

Mr. Brown is president and chairman of the board of Dee Brown Masonry, Inc., in Dallas, Texas. Mr. Brown is the immediate past president of the Mason Contractors Association of America. In addition to being very active in many civic and national activities, he is a member or on the board of several community organizations including the Dallas Executive League and the St. John's Episcopal Church Foundation. Mr. Brown is a contractor and a business owner, and owns both a union company and a non-union company. Mr. Brown is a native Dallasite, and attended Sunset High School and Southern Methodist University. He is married to JoAnn Brown; they have four children and four grandchildren.

ROBERT CASE, II

Since 1984, Mr. Case has been the owner of Coldwell Banker Thayer-Case Realtors in Ellensburg, Washington. In 1981, Mr. Case was appointed to the Board of Trustees of Central Washington University by Governor John Spellman. He served two terms as chairman of that board; in addition, he has served as president of the Kittitas County Board of Realtors, director of the State of WashingtonAssociation of Realtors, and treasurer of the Washington Real Estate Education Foundation. Mr. Case has written numerous published articles on topics covering theology, ethics, banking, securities, economics, and real estate. A 1966 graduate of the University of Washington, Mr. Case also has degrees from Covenant Theological Seminary and London School of Journalism and is a doctoral candidate at Fuller Theological Seminary.

SYDNEY M. DUBERSTEIN

Mrs. Duberstein is active in various community and civic activities, including fundraisers for cancer research and Children's Hospital. She has also served as a government consultant. Previously, she worked for the General Services Administration for 12 years. Mrs. Duberstein was graduated from Pennsylvania State University with a B.A. degree. She was born in Philadelphia, Pennsylvania. She is married, has two children, and resides in McLean, Virginia.

47

PAMELA K. ELMETS

Mrs. Elmets has been Director of Presidential Boards and Commissions in the Office of Presidential Personnel at the White House from 1987 to 1989. She also served as Deputy Associate Director from 1985 to 1987. Previously, she was a Confidential Assistant to the Under Secretary at the Department of Energy. Ms. Elmets was graduated from Sweet Briar College with a B.A. degree. She was born in Englewood, New Jersey. She is married and currently resides in Washington, D.C.

WILLIAM C. HAYES

President of Windsor Financial Corp., Encino, California, Mr. Hayes has previous experience in banking, securities, insurance, and real estate that helped him to build Windsor into a comprehensive development company specializing in planning, financing, construction, leasing, and management of commercial properties.

CHARLES D. HOBBS

Mr. Hobbs is a partner in Bledso, Hobbs and Associates, a public policy and management consulting firm. Previously, Mr. Hobbs was Assistant to the President and Chairman of the President's Low Income Opportunity Board. He also served as Deputy Assistant to the President and Director of Policy Development at the White House from 1984 to 1987. Mr. Hobbs operated a management consulting firm, Charles Hobbs Inc., from 1973 to 1974. From 1970 to 1973, he was Chief Deputy Director of Social Welfare for Governor Reagan in California. Mr. Hobbs graduated from Northwestern University with a B.S. degree in 1955. He was born in Kansas City, Missouri. He served in the United States Air Force. He is married, has three children, and resides in Arlington, Virginia.

MARILYN D. LIDDICOAT

An attorney in Watsonville, California, Mrs. Liddicoat is a past chairman of the Santa Cruz Board of Supervisors and a past president of the Santa Cruz Board of Education. Mrs. Liddicoat was cofounder of the Montessori School of Santa Cruz. She currently serves as a member of the California Regional Water Quality Control Board and a Judge Pro Tem of Municipal Court, hearing Traffic and Small Claims cases. She is also a referee for the California State Bar Court.

JOHN H. MACKEY

President of the International Longshoremen's Association, Savannah, Georgia, Mr. Mackey is past vice president of the South Atlantic and Gulf Coast District of the Longshoremen's Association and trustee of the association's Employers Welfare and Pension Fund. Educated in Savannah public schools, he has certificates from vocational education institutions in bookkeeping, general business, and woodcrafting. He is a member of the Savannah Port Authority and a director of the Frank Callen Boys Club and the King-Tisdale Black Heritage Museum.

MARI MASENG

Ms. Maseng is president of Maseng Communications in Washington, D.C. Previously, she was Assistant to the President and Director of Communications and Planning at the White House. She has also served as Press Secretary for Senator Bob Dole's Presidential Campaign. She was Deputy Assistant to the President and Director of the Office of Public Liaison from 1986 to 1987, and a member of the President's speechwriting staff. Ms. Maseng has served as Assistant Secretary of Transportation for Public Affairs. She also served as vice president of The Beatrice Companies in Chicago, Illinois. Ms. Maseng was graduated from the University of South Carolina with a B.A. degree. She was born in Chicago, and resides in Washington, D.C.

GERTRUDE McDONALD

Recently retired as director of special education for the Fremont Schools, California, Mrs. McDonald has many years of experience as a vocational education guidance counselor, teacher, district administrator, and principal. She was appointed by President Reagan as Chairman of the National Commission for Employment Policy, which oversees the Department of Labor's administration of the Job Training Partnership Act.

JOYCE NEWMAN

A trade show public relations consultant in Manhattan, New York, Mrs. Newman is a former member of the planning staff for the Town of Hempstead, New York's Department of Occupational Resources, where she gained experience in development of a master budget and plan to guide the town's efforts in vocational education and coordinate these programs with State requirements. Mrs. Newman's experience as an educator includes teaching and volunteer work with disabled students.

SALLY J. NOVETZKE

Mrs. Novetzke resides in Cedar Rapids, Iowa, where she is a very strong and dedicated civic and political leader. She is a member or on the board of several community organizations. Mrs. Novetzke and her husband founded U.S. Nameplate, Inc., a business specializing in manufacturing industrial nameplates.

JHOON RHEE

Master Jhoon Rhee is the founder and president of the World Martial Arts Congress for Education. A world-reknowned Martial Artist, Master Rhee is a 9th Degree Black Belt and is known as the Father of U.S. Tae Kwon Do. Master Rhee has devoted all his life to building a new American industry called Tae Kwon Do through which he has motivated many young students to academic, moral, and physical excellence. Heritage, democracy, and free enterprise are words with special meaning to Master Jhoon Rhee, whose measure of success exemplifies the American way. Master Rhee was the principle individual to propose National Teacher Appreciation Day, January 28, 1987. The bill passed the U.S. Congress, and was signed by President Ronald Reagan on October 16, 1986. Master Rhee has served on the President's Council on Physical Fitness and Sports.

PATRICIA GLASER SILVERSMITH

Mrs. Silversmith has been a substitute teacher, a consultant in marketing-public relations, and an art consultant in St. Louis. She was chairman of Alternatives for the Blind and a board member of St. Louis Urban League, Jewish Employment and Vocational Service, and Radio Information Service for the Blind and Handicapped. She was a Deputy Juvenile Officer of County Court in Clayton, Missouri. While living in Missouri, Mrs. Silversmith was elected to Squire's, an honor organization, for her contribution to the Creve Coeur community. Mrs. Silversmith served as a member of the Creve Coeur Chamber of Commerce Budget Committee and the Finance Committee of the city of Creve Coeur. In addition to her recent appointment to the boards of the Anti-Defamation League of Denver and the Children's Diabetes Board of Denver, Mrs. Silversmith has been appointed by Governor Romer to the Colorado State Advisory Committee on Private Occupational Schools. Mrs. Silversmith and her husband Ralph have three children and five grandchildren, and currently reside in Denver, Colorado.

50

ARTHUR E. VADNAIS

Supervisor of education coordination, Minnesota State Board of Vocational-Technical Education, St. Paul, Minnesota, Mr. Vadnais administers educational grants awarded under the Job Training Partnership Act. He also coordinates training activities for area vocational and technical schools, community colleges, and community-based organizations. He supervises telecommunications for the State Board on Vocational-Technical Education (SBVTE) and is responsible for international training program coordination. Mr. Vadnais is also the SBVTE representative for the Defense Vocational Training Programs in Minnesota.

CHRISTINE VALMY

As founder and president of Christine Valmy, Inc., New York, New York, Mrs. Valmy oversees Christine Valmy, Inc., which owns and operates a network of skin care salons and specialized skin care and makeup schools throughout the United States and abroad. The company also manufacturers. Mrs. Valmy, a trained dermatologist, is also director of the firm's International Schools for Esthetics, Skin Care, and Make-up. She has been a free-lance writer for Radio Free Europe. Christine Valmy is listed by the current editions of: Who is Who in the World of Women, Cambridge, England; Who is Who of the American Woman, Marquis, USA; Who is Who in the East, Marquis, USA. She is a member of the Board of Trustees of: People to People International, and the American Beauty Association. Mrs. Valmy is the chairman of Concerned Romainians for a Strong America, and she represents the U.S. Esthetics America Section of the ACA (American Cosmetologists Association) in the International Organization CIDESCO with headquarters in Zurich, Switzerland, and has been cited by the 92nd U.S. Congress for her contributions in the establishment of a new branch of the beauty industry in America, that of skin care.

51

JOYCE L. WINTERTON, EXECUTIVE DIRECTOR

Dr. Joyce L. Winterton is currently the Executive Director of the National Council on Vocational Education. Prior to her current position, Dr. Winterton served as the Acting Deputy Assistant Secretary for the Office of Vocational and Adult Education with the U.S. Department of Education. She was the first Director of President Reagan's Presidential Academic Fitness Awards Program. Dr. Winterton has been a professional staff member for the U.S. Senate Committee on Labor and Human Resources for Committee Chairman Orrin G. Hatch. Her professional background includes experience as a secondary school teacher, a University Teacher Educator, instructor at an Area Vocational School, and a Home Economist in Business. She received a Ph.D. from Colorado State University in Vocational Education, and M.S. and B.S. degrees from Utah State University.

52

Appendix C

REFERENCES AND RESOURCES

Carnevale, Anthony P., Leila J. Gainer, and Ann S. Meltzer. Workplace Basics: The Skills Employers Want. Alexandria, VA: American Society for Training & Development, 1988.

Grant Foundation Commission on Work. Family and Citizenship. The Forgotten Half: Non-College Youth in America. Washington, DC: William T. Grant Foundation, 1988.

Hudson Institute. Workforce 2000. Indianapolis, IN: Hudson Institute, 1987.

Kadamus, James A., and Willard R. Daggett. New Directions for Vocational Education at the Secondary Level. Columbus, OH: N.Y. State Dept. of Education, the ERIC Clearinghouse on Adult, Career, and Vocational Education, National Center for Research on Vocational Education, 1986.

National Commission on Secondary Vocational Education. The Unfinished Agenda. Columbus, OH: National Center for Research in Vocational Education, 1984.

Parnell, Dale. The Neglected Majority. Washington, DC: Community College Press, 1985.

U.S. Department of Education. First Interim Report from the National Assessment of Vocational Education. Washington, DC: Government Printing Office, 1988.